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Issued by the EPA Chief Information Officer, Pursuant to Delegation 1-19, dated 07/07/2005

# INTERIM MOBILE CONTENT CONCEPT DEVELOPMENT

# 1. PURPOSE

This procedure establish the interim required steps for developing concepts for (native) mobile applications (apps), mobile Web apps and mobile websites, before any actual development occurs. The procedures also include information about additional considerations that may apply to the development of the mobile app once the concept has been approved. Mobile apps include, but are not limited to, smart phone and tablet apps, mobile Web apps, and text messaging services (see definitions section below).

CIO Policy 2121.0 "System Life Cycle Management Policy," (04/07/2006) and procedures are currently undergoing review and approval. While the SLCM Policy and procedures are updated, this interim procedure needs to be in place to maximize quality and value, and to minimize risk. Without a meaningful review process for mobile Web and application concepts, EPA offices could develop low-quality and/or duplicative mobile apps and post them to third-party app commercial app stores. In addition, without a review process, offices could develop disparate EPA mobile websites with varying performance and multiple templates.

# 2. SCOPE AND APPLICABILITY

These procedures apply to EPA employees, contractors, and other personnel acting in an official capacity on behalf of EPA, proposing to develop mobile apps and mobile websites for external use. These procedures also apply to mobile apps that are in development. These procedures apply to mobile apps for internal use on a limited basis.

This interim procedure will be superseded by the revised System Life Cycle Management Policy and Procedure or will sunset on June 30, 2013, whichever comes first. The Quality and Information Council will reexamine the procedure no later than one month prior to the sunset date to determine if the procedure should be reviewed and revised to reflect any new information or trends regarding mobile technology.

## 3. AUDIENCE

The audience for these procedures is any EPA employee, contractor, or other person proposing to develop mobile content on behalf of EPA.

# 4. BACKGROUND

Mobile technology offers the potential to engage broad segments of the public, improve agency

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efficiency, and further agency and administration goals. An overwhelming majority of Americans subscribe to a mobile service and the number of citizens accessing the Internet from a mobile device is rising dramatically. Mobile devices are becoming more powerful and more affordable. Mobile devices have the unique ability to fulfill the demand for immediate access to information, regardless of location. Smart phones in particular are becoming more popular, and now incorporate GPS capabilities, cameras, pedometers, and other functions. However, as barriers to entry are relatively low for mobile apps, evaluation criteria are necessary to maximize quality and value, minimize risk, and ensure impartiality as required by federal ethics requirements.

### 5. AUTHORITY

CIO Policy 2180.0 "Web Governance and Management," 09/07/2006

CIO Policy 2171.0, "Information Access Policy," 01/24/2008

CIO Policy 2106.0, "Quality Policy," 10/20/2008

CIO Policy 2121.0 "System Life Cycle Management Policy," 04/07/2006

#### 6. PROCEDURES

EPA will develop Native Mobile Apps, Mobile Web Apps, and Mobile Websites for official Agency business in support of EPA's mission and will adhere to the following steps depending on the type of mobile content.

All mobile content concepts for external use will be reviewed by the Agency's Mobile Access Review Committee (MARC).

When developing mobile content concepts:

- 1. Identify mission need.
- Consider the types of mobile apps and technologies available (Native Mobile Apps, Mobile Web
  Apps, and Mobile Websites) to meet the mission need to ensure that the appropriate tools are
  used. You may want to consult <u>m.epa.gov</u> where all existing public EPA mobile apps are listed
  for current examples.
  - Mobile websites might be a more effective option than a native mobile app, or vice versa, depending on the application requirements, the target audience, and the types of mobile devices accessed by target audience members.
  - External native mobile apps should be accessible on multiple platforms, reflecting the current state of the mobile device marketplace.
  - The application development team must demonstrate that the mobile platforms chosen for the development of an external mobile app accurately reflect the majority of mobile devices accessible to target audience members.
  - Ethics rules require that EPA maintain impartiality and not endorse any product, service, company, non-profit or other enterprise.
  - If you are considering developing a native smart phone app, contact MARC (<u>Mobile App—MARC@epa.gov</u>) to verify the current requirements regarding mobile app development platforms.
- 3. Obtain concept approval from your immediate supervisor and your Senior Information Official (SIO) to proceed. This approval may be delegated to the Information Management Officer (IMO).
- 4. Follow the required steps depending on the type of mobile content
  - 4.1. Native Mobile Apps, Mobile Web Apps, and Mobile Websites for Internal Use
    - 4.1.1. There is no MARC mobile concept review process for mobile content that is strictly for

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internal use.

- 4.1.2. Follow the usual processes for establishing internal products for your office and contact the MARC (<a href="Mobile App-MARC@epa.gov">Mobile App-MARC@epa.gov</a>) to register the app or website during the development and completion stage. By registering the app with MARC, this ensures that the originating office can capitalize on best practices from MARC, as well as create best practice opportunities for other offices in the Agency who may be interested in developing mobile content for internal use.
- 4.1.3. MARC will provide a listing of all internal EPA mobile apps and mobile websites on <a href="http://yosemite.epa.gov/OEI/webguide.nsf/mobile">http://yosemite.epa.gov/OEI/webguide.nsf/mobile</a>.

# 4.2. Mobile Web Apps and Mobile Websites for External (Public) Use

- 4.2.1. For mobile Web apps and mobile websites for external use that were in development before this procedure was established, please contact the Mobile Access Review Committee (MARC) (Mobile App—MARC@epa.gov) within 10 business days to determine what steps are necessary to ensure your mobile Web pages can be posted on m.epa.gov, as required.
- 4.2.2. Discuss the concept with the <u>Web Content Coordinator</u>, who will discuss with the Public Affairs Director or Communication Director. Each program and region office has a different process, but you will be required to indicate who is aware and responsible for your office on the Mobile Web Concept Review Form. Ultimate accountability for mobile content is at the most senior level, typically at the Assistant Administrator or Regional Administrator level, which must provide sufficient resources and ensure that mobile content is aligned with Agency and program priorities.
- 4.2.3. Submit the Mobile Web Concept Review Form to the MARC (<u>Mobile App—MARC@epa.gov</u>) for review and consideration. Development must not begin until MARC approves the mobile concept. Expect about two weeks for MARC to complete the evaluation of the mobile Web concept. MARC will work with offices to ensure mobile content is in the correct template and relevant to your mobile users.
- 4.2.4. For websites created and managed in a Web content management system that are optimized for mobile browsers, mobile concept review is not necessary.

# 4.3. Native Mobile Apps for External (Public) Use

- 4.3.1. For native mobile apps for external use that were in development before this procedure was established, please contact the Mobile Access Review Committee (MARC) (Mobile App—MARC@epa.gov) within 10 business days to determine which of the steps listed below are necessary for an expedited concept review process.
- 4.3.2. For proposed native mobile apps, discuss the concept with the Web Content Coordinator, who will discuss with the Public Affairs Director or Communication Director. Each program and region office has a different process, but you will be required to indicate who is aware and responsible for your office on the Native Mobile Application Evaluation Form. Ultimate accountability for mobile apps is at the most senior level, typically at the Assistant Administrator or Regional Administrator level, which must provide sufficient resources and ensure that mobile apps are aligned with Agency and program priorities. For existing native mobile apps that need modifications, routine upgrades, etc., consult with MARC to determine if a new concept evaluation form needs to be submitted.
- 4.3.3. Complete the Native Mobile Application Evaluation Form and submit to MARC (Mobile App—MARC@epa.gov) for review and consideration. Development must not begin until MARC approves the mobile application concept. Expect about two weeks under normal circumstances for MARC to complete the evaluation of the mobile app concept. Emergencies or other unique situations may be expedited. Upon completion, the app will be approved or rejected based on the following criteria:

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- Feasibility
- Effectiveness
- Risk of Private Competition
- Government Justification
- Cost and/or Cost-Effectiveness

Refer to the Native Mobile Application Evaluation Guidance Document for explanations of each criterion.

- 4.3.4. Upon approval from MARC, complete the required steps for the System Life Cycle Management (SLCM) procedure <a href="http://www.epa.gov/irmpoli8/policies/CIO21210p010.pdf">http://www.epa.gov/irmpoli8/policies/CIO21210p010.pdf</a> and initiate product review with the Office of Web Communications (OWC). <a href="http://www.epa.gov/productreview/">http://www.epa.gov/productreview/</a>. As appropriate, mobile apps should be developed using established Agency standard development tools and follow procedures, standards, and guidance for specific tools or processes, if applicable.
- 4.3.5. MARC will assist in the deployment of approved native mobile apps to third-party app stores in which EPA has Terms of Service (TOS) agreements.

For all types of mobile content (Native Mobile Apps, Mobile Web Apps, and Mobile Websites) the following procedures, standards, guidance, and processes always apply:

- 5. Consider Security, IT Infrastructure and Architecture requirements
  Determine which security, IT infrastructure and architecture requirements and processes apply.
  Not all EPA mobile apps need the same level of security considerations and documentation.
  Please consult with your Information Security Officer (ISO) to determine what security steps are needed. Please refer to <a href="http://intranet.epa.gov/itsecurity/compoversightassit/iso-list.html">http://intranet.epa.gov/itsecurity/compoversightassit/iso-list.html</a> for a list of the current Information Security Officers.
- 6. Protect Privacy

The statutes and regulations that govern privacy, the collection of personal information and the protection of a user's personally identifiable information (PII) still apply when using mobile apps. Refer to EPA's Privacy Policy for further information <a href="http://www.epa.gov/privacy/">http://www.epa.gov/privacy/</a>. Consult with the Agency's Privacy Officer to determine privacy implications and specific requirements.

7. Ensure Accessibility

EPA's content in mobile apps must be accessible as required by Section 508 of the Rehabilitation Act of 1973, as amended.

- 7.1. Make EPA content accessible in accordance with EPA's Accessible Electronic and Information Technology Policy, unless it would impose an undue burden on the Agency. To claim an undue burden, you must show how there is a significant difficulty or expense and comply with the undue burden procedures. <a href="http://www.epa.gov/irmpoli8/policies/2130.pdf">http://www.epa.gov/irmpoli8/policies/2130.pdf</a>
- 7.2. If making the content accessible would impose an undue hardship on the Agency, or would otherwise fall under a Section 508 exception, you should provide alternative access. Examples of alternative access include, but are not limited to, linking to an accessible version of the content on the EPA website from an inaccessible third-party site, providing EPA contacts for additional assistance, and posting a text-only version. www.epa.gov/accessibility
- 8. Use Consistent Look and Feel

Follow existing Agency standards regarding use of the EPA logo <a href="http://www.epa.gov/productreview/stylebook/logo.html">http://www.epa.gov/productreview/stylebook/logo.html</a>.

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# The following requirements need to be considered, depending on the mobile content, but may not be applicable:

#### 9. Provide Access with Links

Every external (public-facing) EPA mobile app must be linked from, and every external mobile Web page must reside on <a href="http://m.epa.gov/">http://m.epa.gov/</a>. There must also be a link to the equivalent and Section 508 accessible information or functionality on <a href="http://www.epa.gov">http://www.epa.gov</a>.

# 10. Protect Copyright

Copyrighted material may not be copied or displayed by EPA, or incorporated in EPA mobile apps unless written permission of the copyright owner has been obtained.

- Protect copyright as appropriate in accordance with EPA's "Posting Copyrighted Works on EPA Web Site" policy (http://intranet.epa.gov/oei/imitpolicy/qic/ciopolicy/2181.p.pdf) and "Copyright Issues of Special Interest to EPA Employees" (http://yosemite.epa.gov/OEI/webguide.nsf/content/copyright).
- For all questions regarding copyright, you should contact the Office of General Counsel (OGC), General Law Office.

#### 11. Provide Disclaimers and Disclosures

Determine if a disclaimer or a disclosure is needed. Please note that, in general, EPA may not endorse any product, service or enterprise. OGC can provide further assistance on determining when disclaimers or disclosures are necessary.

- A disclosure is a statement of information or risks associated with use of the mobile app.
- A disclaimer makes a statement that limits or specifies rights or obligations. In many instances you will need to include the standard disclaimer that views expressed are opinions and not official Agency policy. Another often used disclaimer is the standard exit disclaimer when you include a link to an outside website.

## 12. Prepare Information Collection Request (ICR) Package

Mobile apps do not automatically trigger an ICR. OMB Memo April 7, 2010 <a href="http://www.whitehouse.gov/omb/assets/inforeg/SocialMediaGuidance\_04072010.pdf">http://www.whitehouse.gov/omb/assets/inforeg/SocialMediaGuidance\_04072010.pdf</a> explains that "certain uses of social media and web-based interactive technologies will be treated as equivalent to activities that are currently excluded from the [Paperwork Reduction Act] PRA." However, certain activities such as surveys and polls are subject to ICR requirements. Adhere to ICR processes and procedures when applicable. <a href="http://intranet.epa.gov/icrintra/">http://intranet.epa.gov/icrintra/</a>

# 7. RELATED DOCUMENTS

- CIO Policy 2120.0 "Capital Planning and Investment Control (CPIC) Program Policy," 12/15/2005
- CIO Policy 2100.1 "Accessible Electronic and Information Technology," 04/05/2006
- CIO Policy 2151.0 "Privacy Policy," 09/27/07
- CIO Policy 2181.0, "Posting Copyrighted Works on EPA Web Site," 10/25/2007
- NIST Special Publication 800-18 Revision 1 Guide for Developing Security Plans for Federal Information Systems

## 8. ROLES AND RESPONSIBILITIES

The Chief Information Officer/Assistant Administrator, Office of Environmental Information, is responsible for monitoring compliance with this procedure.

The Office of Information Analysis and Access (OIAA) in the Office of Environmental Information (OEI) provides appropriate Agency-wide mobile app technology services, guidance, and technical

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assistance to Program and Regional offices in implementing the requirements of this procedure.

The Office of Web Communications (OWC) in the Office of External Affairs and Environmental Education (OEAEE) applies the requirements of this procedure in its functions of managing web-related communications and product review.

Office of General Counsel (OGC) provides legal guidance relating to copyright issues, the Web, and oversees ethics requirements for EPA employees.

The Senior Information Officials (SIOs) ensure the information and information technology utilized and managed by their organization supports its business needs and mission and helps to achieve EPA's strategic goals; and ensure establishment and implementation of effective processes and procedures within their organization for compliance with Agency information and information technology policies, procedures, operations and standards; statutes; and Executive Branch directives.

Information Management Officers (IMO) supports the SIO in implementing the SIO's information technology and information management functions and responsibilities.

The Mobile Access Review Committee (MARC) is a committee comprised of members from OEAEE, OEI, and OGC. Additional members are drawn from the OEI Lead Region and one program office on a rotating basis. The National Content and National Infrastructure Managers of the Web Council are standing members. The committee works with subject matter experts as needed. The committee also maintains the mobile apps look and feel requirements based on the latest technology, EPA requirements, and best practices. The committee will provide quarterly updates to the Information Investment Subcommittee (IIS) of the Quality and Information Council (QIC).

# 9. **DEFINITIONS**

**Mobile App or Application** – any native or Web application (app) specifically designed to be accessed and utilized on a handheld mobile device, such as a cell phone, smart phone, tablet, or portable digital assistant (PDA).

**Native Mobile Apps** – Native apps can come preinstalled on a mobile device, such as a smart phone, but can also be downloaded from app stores and other websites. Native apps can be programmed to leverage many smart phone capabilities, such as the camera and geo-location.

**Mobile Web Apps** - Mobile Web apps reside on a server and are accessed using a mobile browser. Mobile Web apps are distinct from mobile websites that only provide simple content. Mobile Web apps use server-side or client-side processing (e.g., Javascript) to provide a level of interactivity akin to many downloadable native apps.

**Mobile Websites** - A mobile website is a set of interconnected Web pages designed specifically to be accessed by mobile Web browsers.

**PII** – "Personally Identifiable Information" refers to information that can be used to distinguish or trace an individual's identity, such as their name, social security number, biometric records, etc. alone or when combined with other personal or identifying information which is linked or linkable to a specific individual, such as date and place of birth, mother's maiden name, etc.

# 10. WAIVERS

There are no waivers from these procedures.

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# 11. RELATED POLICIES, STANDARDS AND GUIDANCE

All design and evaluation requirements, best practices, and information about EPA mobile apps and MARC can be found on the MARC page, including the Native Mobile Application Evaluation Form, Native Mobile Application Evaluation Guidance Document, and the Mobile Web Concept Review Form. <a href="http://yosemite.epa.gov/OEI/webguide.nsf/mobile">http://yosemite.epa.gov/OEI/webguide.nsf/mobile</a>.

CIO 2121-P-01.0 System Life Cycle Management (SLCM) procedure, 06/28/2007 <a href="http://www.epa.gov/irmpoli8/policies/CIO21210p010.pdf">http://www.epa.gov/irmpoli8/policies/CIO21210p010.pdf</a>

Requirements for creating, customizing, and maintaining Web products on the Agency's Public Access and Intranet servers are found on the <u>EPA Web Guide</u>

Federal mobile app requirements, best practices, and guidance are found at Webcontent.gov <a href="http://www.usa.gov/webcontent/technology/mobile\_apps.shtml">http://www.usa.gov/webcontent/technology/mobile\_apps.shtml</a>

#### 12. MATERIAL SUPERSEDED

Not applicable.

## 13. ADDITIONAL INFORMATION

For further information about these procedures, please contact the Policy and Program Management Branch, Office of Information Analysis and Access, in the Office of Environmental Information.

Malcolm D. Jackson, Assistant Administrator and Chief Information Officer Office of Environmental Information